*CLAIM AMENDMENTS*

1.-29. (Canceled)

30. (New) An isolated DNA consisting of:

(a) a nucleotide sequence of nucleotide Nos. 279 to 1274 of SEQ ID NO: 2, or

(b) a nucleotide sequence that hybridizes to the nucleotide sequence of (a) above under stringent conditions, which encodes a deoxyribonuclease having an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6.

31. (New) An isolated DNA consisting of:

(a) a nucleotide sequence of the nucleotide Nos. 213 to 1274 of SEQ ID NO: 2, or

(b) a nucleotide sequence that hybridizes to the nucleotide sequence of (a) above under stringent conditions, which encodes a primary translation product of a deoxyribonuclease which in mature protein form has an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6.

32. (New) A recombinant vector comprising the DNA of:

(i) a nucleotide sequence of nucleotide Nos. 279 to 1274 of SEQ ID NO: 2,

(ii) a nucleotide sequence that hybridizes to the nucleotide sequence of (i) above under stringent conditions, which encodes a deoxyribonuclease having an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6,

(iii) a nucleotide sequence of nucleotide Nos. 213 to 1274 of SEQ ID NO: 2, or

(iv) a nucleotide sequence that hybridizes to the nucleotide sequence of (iii) above under stringent conditions, which encodes a primary translation product of a deoxyribonuclease which in mature protein form has an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6.

33. (New) An expression vector comprising

(a) the DNA of:

(i) a nucleotide sequence of nucleotide Nos. 279 to 1274 of SEQ ID NO: 2,

(ii) a nucleotide sequence that hybridizes to the nucleotide sequence of (i) above under stringent conditions, which encodes a deoxyribonuclease having an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6,

(iii) a nucleotide sequence of nucleotide Nos. 213 to 1274 of SEQ ID NO: 2, or

(iv) a nucleotide sequence that hybridizes to the nucleotide sequence of (iii) above under stringent conditions, which encodes a primary translation product of a deoxyribonuclease which in mature protein form has an endonuclease activity that cleaves DNA, in a pH range of from ca. 4.0 to ca. 7.6, and

(b) a promoter operably linked to said DNA.

34. (New) A transformant obtained by transforming a host cell with the expression vector of claim 33.

35. (New) A method for producing the deoxyribonuclease, which comprises culturing the transformant of claim 34 in a medium and recovering the deoxyribonuclease from a resulting culture.

36. (New) An isolated DNA encoding a deoxyribonuclease comprising:

(a) an amino acid sequence of amino acid Nos. 1 to 316 of SEQ ID NO: 1, or

(b) the amino acid sequence of (a) above, except that at least one acid is deleted, substituted, inserted, added, or modified, which in mature protein form has an endonuclease activity that cleaves a DNA, in a pH range of from ca. 4.0 to ca. 7.6.

37. (New) An expression vector comprising the DNA of claim 36 and a promoter operably linked to said DNA.

38. (New) A transformant obtained by transforming a host cell with the expression vector of claim 37.

39. (New) A method for producing a deoxyribonuclease, which comprises culturing the transformant of claim 38 in a medium and recovering the deoxyribonuclease from a resulting culture.

40. (New) An isolated DNA comprising a nucleotide sequence of the nucleotide Nos. 279 to 1274 of SEQ ID NO: 2.

41. (New) An isolated DNA comprising a nucleotide sequence of the nucleotide Nos. 213 to 1274 of SEQ ID NO: 2.